



Central Valley Clean Water Association

Representing Over Fifty Wastewater Agencies

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Sent via email to: dwkirm@waterboards.ca.gov

David Kirn
Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, Suite #200
Rancho Cordova, California 95762

SUBJECT: Comments on the Tentative Waste Discharge Requirements for Bear Valley Water District Wastewater Treatment Plant

Dear Mr. Kirn:

The Central Valley Clean Water Association (CVCWA) submits these comments on the tentative waste discharge requirements for the Bear Valley Water District (District) Wastewater Treatment Plant (Tentative Order). CVCWA is a non-profit organization that represents its members in regulatory matters affecting surface water discharge and land application with a perspective to balance environmental and economic interests consistent with applicable law. Consequently, CVCWA has a keen interest in the permit requirements adopted by the Central Valley Regional Water Quality Control Board (Central Valley Water Board) in waste discharge permits. CVCWA's comments on certain permit provisions are provided below.

I. Secondary Treatment Requirement at 20:1 Dilution

CVCWA supports the proposed Tentative Order provision to allow the discharge of secondary effluent during periods when dilution in the receiving water (Bloods Creek) equals or exceeds a dilution ratio of 20:1. This is consistent with the past practice of the Central Valley Water Board on numerous NPDES permits in the Central Valley and is also consistent with guidance issued by the Department of Public Health. The proposed provision, and associated effluent limits, will provide for the reasonable protection of beneficial uses of Bloods Creek. This is an important provision of this Tentative Order since it will allow the District to meet its permit requirements without the construction of costly and unnecessary tertiary treatment facilities when it discharges pursuant to this permit.

II. Aluminum Effluent Limits

CVCWA respectfully requests that the Central Valley Water Board reconsider the proposed effluent limits for aluminum based on the recent results of a Water Effect Ratio (WER) study completed by the City of Auburn. The Auburn study indicates that the use of the current U.S. EPA aquatic life criteria for aluminum is overprotective in Central Valley foothill streams. Previous WER studies by the cities of Manteca, Yuba City and Modesto have confirmed that the use of the U.S. EPA aluminum criteria is significantly overprotective for other types of surface waters in the Central Valley. The use of the aluminum WER results for the City of Auburn in the District's permit would be an appropriate and reasonable exercise of the Central Valley Water Board's best professional judgment in interpreting the Basin Plan's narrative objective for toxicity, as it applies to aluminum.

Further, when using U.S. EPA's recommended ambient water quality criteria, the Central Valley Water Board is required to consider other relevant information to determine their applicability. (40 C.F.R. § 122.44(d)(1)(vi)(B).) U.S. EPA's recommended ambient water quality criteria for aluminum includes a recommended 4-day average (chronic) criterion of 87 µg/L, which is based on studies conducted on waters with low pH (6.5 to 6.8) and hardness (<10 mg/L as CaCO₃). As indicated in the Fact Sheet, hardness of Bloods Creek ranges between 10 mg/L and 91 mg/L. (Tentative Order, p. F-34.) For receiving waters that do not experience such conditions, U.S. EPA indicates that the aluminum criterion of 750 µg/L is protective of aquatic life. Accordingly, the Central Valley Water Board should not consider the chronic criterion of 87 µg/L applicable and should use the criterion of 750 µg/L for the protection of aquatic life.

III. Copper and Lead Effluent Limits

CVCWA requests revisions in the proposed effluent limits for copper and lead. The derivation of these proposed effluent limits is based on the assumptions described in Tables F-6 and F-8 of the permit Fact Sheet. As shown in these tables, the controlling fraction of effluent in setting the proposed limits was 100% for each trace metal. Since the permit only allows the District to discharge to Bloods Creek during periods of high creek flow where dilution exceeds 20:1, the appropriate effluent fraction to use in effluent limit derivation is 5%. The condition where the effluent fraction would theoretically be 100% will not be allowed under the proposed permit. Use of the 5% effluent fraction values would result in slightly higher effluent limits for copper and lead than are proposed in the Tentative Order.

IV. Ammonia Effluent Limits

CVCWA recommends that the Central Valley Water Board consider the possible addition of an effluent limit for pH to the proposed permit that would establish a minimum effluent pH of 6.0 and a maximum effluent pH of 8.0. This would then allow the use for a pH value of 8.0 in the derivation of effluent limits for ammonia, resulting in higher ammonia effluent limits. The minimum pH limit of 6.0 is justified since the District will only discharge during stream flow conditions providing dilution conditions of 20:1 or greater. This issue should be discussed with the District to ensure that the District is satisfied with this suggested change and is convinced that possible future pH violation risk is offset by more achievable ammonia effluent limits. In the proposed permit, the ammonia effluent limits are based on an effluent limit of 8.5 (the receiving water objective), because it has been determined that there is no reasonable potential (and therefore no effluent limit) for pH.

V. Numeric WET Chronic Toxicity Trigger

CVCWA requests reconsideration of the proposed chronic toxicity trigger of 1 TU_c. The permit stipulates that the District can only discharge during periods when dilution in the Bloods Creek exceeds 20:1 dilution. It is therefore reasonable and appropriate that the chronic toxicity trigger be set at 20 TU_c, since toxicity below the trigger will always be protective of the aquatic life uses in the creek and will always result in compliance with the Basin Plan narrative toxicity objective.

The District may be significantly harmed by the use of the proposed 1 TU_c toxicity value as a trigger for accelerated monitoring and, depending on the outcome of that testing, a Toxicity Reduction Evaluation. Both the accelerated testing and TRE efforts are costly and resource intensive, especially for a small community such as the District. As a result, this testing and special study should only be required where a violation of the narrative toxicity objective could reasonably be expected to occur. For the District, setting the trigger at 1/20th of the level at which the District's effluent could possibly cause toxicity in the receiving water is not reasonable.

VI. Compliance Schedule for Aluminum and Ammonia

The Tentative Order appropriately includes a compliance schedule for aluminum and ammonia (to the extent that such effluent limits are appropriate). However, the identified tasks and due dates contained within the compliance schedule are too specific and do not provide the District with needed flexibility. To avoid non-compliance with the Tentative Order, we recommend that the compliance schedule provisions be revised by eliminating tasks v, vi, vii, and viii. This level of detail is appropriate for inclusion in the District's Method of Compliance Workplan/Schedule but should not be included in the Tentative Order.

CVCWA appreciates your consideration of these comments and respectfully requests that the Central Valley Water Board revise the Tentative Order accordingly. If you have any questions or we can be of further assistance, please contact me at (530) 268-1338.

Sincerely,



Debbie Webster
Executive Officer

cc: Julio S. Guerra, Bear Valley Water District (email)
Pamela Creedon, CVRWQCB (email)